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Remarks

In the present response, one claim (claim 8) is amended. Claims 1-8 and 10-23 are presented for examination.

I. Claim Rejections: 35 USC § 102

Claims 1-18 and 21-23 are rejected under 35 USC § 102(e) as being anticipated by USPN 6,134,710 (hereinafter Levine). This rejection is traversed.

A proper rejection of a claim under 35 U.S.C. §102 requires that a single prior art reference disclose each element of the claim. See MPEP § 2131, also, *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983). Since Levine neither teaches nor suggests each element in claims 1-18 and 21-23, these claims are allowable over Levine.

Claim 1

Claim 1 recites numerous limitations that are not taught or suggested in Levine. By way of example, claim 1 recites hint code that includes (i) a hint instruction **and** (ii) a selected instruction to be removed from the set of object code. In other words, the hint code includes **both** the hint instruction and the selected instruction to be removed from the object code. Nowhere does Levine teach or suggest that the hint code itself includes both a hint instruction and the instruction removed from the object code. Applicants respectfully assert that a proper rejection under § 102 requires Levine to teach each element in claim 1.

The Office Action cites FIGS. 12A and 12B of Levine for teaching these limitations. Applicants respectfully disagree. Column 14, lines 22-30 of Levine teach replacing object code (instruction B) with a branch instruction. The branch instruction branches to a preload instruction that preloads data cache. The branch instruction, however, does not itself include both (i) a hint instruction **and** (ii) a selected instruction to be removed from the set of object code. By contrast, the branch instruction merely causes a branch to a preload instruction that preloads data cache. This teaching in Levine should be compared with the claimed recitations. Claim 1 recites that the hint code includes **both** the hint instruction and the selected instruction to be removed from the

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object code. Nowhere does Levine teach or suggest that the hint code itself includes both a hint instruction and the instruction removed from the object code.

Claims 2-7 depend from claim 1. Thus, for at least the reasons given in connection with claim 1, claims 2-7 are also allowable over Levine.

Claim 8

Claim 8 recites numerous limitations that are not taught or suggested in Levine. By way of example, claim 8 recites that the hint instruction includes a branch **prediction** instruction. Levine does not teach or suggest this limitation. By contrast, Levine teaches inserting a **preload** instruction in the instruction sequence (see col.7, lines 36-41). As the Examiner is well aware, a preload instruction, however, is not a branch prediction instruction.

In the Office Action, the Examiner asserts that Levine teaches both pre-fetch instructions and branch prediction instructions (see OA rejection of claims 17 and 18). Applicants respectfully disagree. Levine only teaches preload instructions. Levine does mention touch instructions. However, Levine clearly states (col. 7, lines 42-43): "The preloaded instruction, referred to as a touch instruction, causes the TLBs or cache to be preloaded prior to the execution of the offending instruction." In other words, the terms preload instruction and touch instruction are synonyms in Levine.

Nowhere does Levine teach or suggest a branch **prediction** instruction. Per MPEP 2111.01, words in a claim must be given their plain meaning given to the term by those of ordinary skill in the art. Applicants respectfully request the term "branch prediction instruction" be given its plain meaning according to those of ordinary skill in the art.

Claims 10-15 depend from claim 8. Thus, for at least the reasons given in connection with claim 8, claims 10-15 are also allowable over Levine.

Claim 16

Claim 16 recites numerous limitations that are not taught or suggested in Levine. By way of example, claim 16 recites executing a break instruction to cause a processor to retrieve hint code. The hint code includes (i) a hint instruction, (ii) the selected instruction, **and (iii)** an instruction to resume execution of the object code. In other

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words, the hint code includes three different elements: a hint instruction, the selected instruction, and the instruction to resume execution of the object code. Nowhere does Levine teach or suggest that the hint code itself includes all three elements. Applicants respectfully assert that a proper rejection under § 102 requires Levine to teach each element in claim 16.

The Office Action cites FIGS. 12A and 12B of Levine for teaching these limitations. Applicants respectfully disagree. Column 14, lines 22-30 of Levine teach replacing object code (instruction B) with a branch instruction. The branch instruction branches to a preload instruction that preloads data cache. The branch instruction, however, does not itself include all three elements: (i) a hint instruction **and** (ii) the selected instruction **and** (iii) an instruction to resume execution of the object code. By contrast, the branch instruction merely causes a branch to a preload instruction that preloads data cache. This teaching in Levine should be compared with the claimed recitations. Claim 16 recites that the hint code includes three different elements. Nowhere does Levine teach or suggest that the hint code itself includes these three elements.

Claims 17-23 depend from claim 16. Thus, for at least the reasons given in connection with claim 16, claims 17-23 are also allowable over Levine.

II. Claim Rejections: 35 USC § 103

Claims 19 and 20 are rejected under 35 USC § 103(a) as being unpatentable over Levine in view of Grimsrud. Applicants respectfully traverse.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art cited must teach or suggest all the claim limitations. *See* M.P.E.P. § 2143. Applicants assert that the rejection does not satisfy these criteria.

As discussed in connection with Section I, Levine fails to teach or suggest all of the limitations of independent claim 16. Grimsrud fails to cure the deficiencies of Levine. Claims 19 and 20 depend from claim 16. Thus, for at least the reasons given in

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connection with claim 16 in Section II, dependent claims 19 and 20 are allowable over
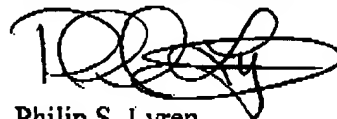
Levine in view of Grimsrud.

CONCLUSION

In view of the above, Applicants believe claims 1-8 and 10-23 are in condition for

allowance. Allowance of these claims is respectfully requested.

Any inquiry regarding this Amendment and Response should be directed to Philip

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all correspondence should continue to be directed to the following address:

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Respectfully submitted,

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CERTIFICATE UNDER 37 C.F.R. 1.8

The undersigned hereby certifies that this paper or papers, as described herein, is being transmitted to the United States Patent and Trademark Office facsimile number 703-872-9306 on this 25th day of April, 2005.

By
Name: Be Henry

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